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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TAKAYUKI TSUTSUMI and YOSHIKAZU
KOBAYASHI

Appeal 2010-001564
Application 10/648,277
Technology Center 2400

Before MAHSHID D. SAADAT, MARC S. HOFF, and
BRADLEY W. BAUMEISTER, *Administrative Patent Judges*.

BAUMEISTER, *Administrative Patent Judge*.

DECISION ON APPEAL¹

¹ The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF CASE

Summary

Claims 1-3, 6, 12, 15-17, 20, 28 and 29 stand rejected under 35 U.S.C. § 102(e) as anticipated by Takayama (US 2002/0025810 A1; published Feb. 28, 2002). Claims 5, 8-11, 13, 14, 19, and 22-27 stand rejected under 35 U.S.C. § 103(a) as obvious over Takayama in view of five additionally cited prior-art references.² Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejections of all of claims 1-3, 5, 6, 8-17, 19, 20, and 22-29. Claims 4, 7, 18, and 21 have been indicated as containing allowable subject matter.

We reverse.

Background

Appellants' invention relates to a fast roaming system for changing the connection of a mobile terminal (MT) from an existing or "parent" station Access Point (AP) to a roaming destination AP (Abstract; Fig. 3). In the prior-art roaming system, "[a] parent station AP 102-A . . . fetches over a [local area network] LAN 5 hopping data for [destination] APs 102-B and 102-C and stores these [sic] data" (Spec. 3; *see* Fig. 1). The MS 101 can, thereafter, download the hopping data for the peripheral APs from the parent station AP (*id.*). In contrast, the mobile terminal of the present invention includes an AP search unit and an AP data table (Spec. 5; Fig. 3). The mobile terminal's AP search unit, itself, searches for peripheral connectable APs and obtains AP data directly from the peripheral APs as well as from the parent station AP (Spec. 5-6; Fig. 3). This obtained AP data is stored in the AP data table (*id.*).

² The teachings of these additional references are not disputed.

Independent claim 1 is illustrative and reads as follows with emphasis added to the disputed claim language:

1. A fast roaming system comprising at least one mobile terminal and at least two access points,

wherein the at least one mobile terminal, while communicating over a wireless LAN with an access point of the at least two access points, serving as a parent station, can be quickly switched from the parent station to an adjacent access point of the at least two access points having an overlapping communication range;

wherein each of the at least two access points comprises:

a wireless LAN interface for communicating with the mobile terminal over the wireless LAN,

a roaming unit for performing a roaming operation,

a beacon transmitter for transmitting a beacon signal to provide synchronization with the mobile terminal, and

a data transmitter for transmitting, to the mobile terminal, access point data required for the roaming operation; and

wherein the mobile terminal comprises:

a wireless LAN interface for communicating with an access point over the wireless LAN,

an access point search unit for searching for peripheral connectable access points and for obtaining access point data,

a roaming execution unit for transferring the connection of the mobile terminal from a currently connected access point to another, designated access point,

an access point data table in which the access point data detected and obtained by the access point search unit are recorded,
and

a function controller for, when a condition for communicating with the currently connected access point matches a predetermined roaming operation start condition, employing a predetermined order sequence to select one of the access points entered into the access point data table, and for driving the roaming unit to perform the roaming operation for the access point that is selected.

Claim 15, the only other independent claim, is directed to a sub-portion of the subject matter recited in claim 1, “[a] mobile terminal capable of performing fast roaming.” Claim 15 also includes the disputed language of claim 1 that is emphasized, *supra*.

The Examiner interprets the disputed claim language in the following manner: “[T]he step [sic: function] of ‘searching for peripheral connectable access points’ is taught by [Takayama’s] *scanning* operation, wherein the station downloads radio information associated with each of the access points and determines which one to connect to” (Ans. 9) (emphasis added). “Further, the CPU in the mobile station is capable of searching [it’s own] memory in which the access point data is received to check that hopping information of registered neighboring access points are saved and registered” (*id.*). The claim limitation of obtaining access point data reads on the Takayama’s disclosure of scanning peripheral APs and downloading peripheral AP hopping data (Ans. 9-10). Also:

[T]he disclosed *memory* that stores hopping information associated with registered neighboring access points (paragraph 0080) and “grasp(ing) the latest radio situation of the neighboring access point into which the station is entered subsequently and also *forms the information as the database*” (paragraph 0081) teaches the claim limitation of “an access point data table in which the access point data detected and obtained by the access point search unit are recorded” (emphasis added by Examiner).
(Ans. 10).

Appellants argue *inter alia* that Takayama does not disclose the claim limitation, “an access point data table in which the access point data detected and obtained by the access point search unit are recorded.” Appellants

acknowledge that Takayama records hopping data (App. Br. 15), but they contend that “download[ing] the database of hopping information of the neighboring access points from the connected access point” does not constitute “detecting” data as required by the independent claims (App. Br. 14). Appellants also acknowledge that Takayama’s mobile terminal scans neighboring APs for beacon signals, but they contend that the scanned beacon signals are not recorded to a data table (*id.*). As such, Takayama does not disclose recording to an AP data table any *detected* information (App. Br. 13-15).

ANALYSIS

Appellants’ arguments are persuasive. We therefore find the Examiner has failed to establish that Takayama discloses “an access point data table in which the access point data detected and obtained by the access point search unit are recorded” as required by independent claims 1 and 15. Accordingly, we will not sustain the Examiner’s anticipation rejection of those claims or dependent claims 2, 3, 6, 12, 16, 17, 20, 28 and 29.

With respect to the remaining obviousness rejections of dependent claims 5, 8-11, 13, 14, 19, and 22-27, the Examiner has not shown that any of the additionally cited prior-art references cures the deficiency of Takayama explained above. Accordingly, we will not sustain the Examiner’s obviousness rejections of these claims either.

DECISION

The Examiner's decision rejecting claims 1-3, 5, 6, 8-17, 19, 20, and 22-29 is reversed.

REVERSED

gvw

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